

RESERVATION SYSTEM

The following document presents three key work elements that describe how a reservation system might work on different WSF routes, and how a customer could access and use the system. These work products were developed at different times during the evaluation of possible reservation system options and include:

- Conceptual assessment of how a reservation system might work at a route level, using three example routes
- Conceptual framework policies for how a reservation system, including how customers could expect the system to address certain operating challenges
- Four scenarios describing how a customer might use the system in different situations

This document does not constitute a formal pre-design; it is simply a working document that lays out the potential operating policies of a reservation system. A pre-design study will need to be completed prior to proceeding with system funding.

Reservation System Route-Level Operating Scenarios

If WSF is to continue moving forward in implementing a reservation system, it is logical to build on the current program at Port Townsend-Keystone while developing reservations at related terminals in the north Sound area. Aside from being related to one another with some common travelers, the Edmonds-Kingston route will be among the first to trigger the level of service standards based on the relationship of demand to capacity. Therefore, using these routes to both pilot and stage the implementation of the reservation system has multiple benefits to the users and the system.

Once reservations at these terminals are implemented, moving to the challenging terminals at Mukilteo, Clinton, Seattle, Bainbridge and Bremerton would be a logical progression and lessons learned will be directly applicable to these routes. Finally, the very challenging terminal at Fauntleroy could be addressed. By using this order of implementation the uncertainties surrounding the future of the Seattle Central Waterfront and on-going discussions about different organization for the Fauntleroy-Vashon-Southworth route will be clearer and will reduce possible customer confusion about why reservations are being implemented, as well as reduce the potential of deploying equipment that needs to be modified or re-deployed in the near term.

It is recommended that implementation in the North Sound is accompanied by a nearly simultaneous approach with Anacortes-San Juan Islands on a parallel, but quite different, implementation pathway. Implementation on the Anacortes-San Juan Islands routes is likely to require several seasons.

This Appendix describes what the system could look like from the customer's perspective. The first section describes how different routes could have different policies. The second section leads a customer step by step on how they could use the system.

I. OPERATING SCENARIOS

**Edmonds-Kingston, Seattle-Bainbridge, Seattle-Bremerton,
Mukilteo-Clinton, Port Townsend-Keystone**

Desired End State, or how the desired characteristics of the system after full implementation:

- Peak sailings, (those with an average volume to capacity ratio of more than .9) -- 90% reserved, V/C ratio .8 to .9; 80% reserved, all others 50% reserved. The V/C ratios would be evaluated on a seasonal basis. It is also possible that the base level of reserved capacity could be higher as any unreserved space simply becomes available to those who wish to travel on a standby basis. This also has the benefit of making possible the conversion of non-reservation users into reservation use without the need to adjust the available reserved capacity.
- Reservation release could be uniform: 30% of reserved capacity at one month, 50% at one week, 80% one day prior, 100% day of sailing. Although this would be adjusted based on actual experience with reservation-making into multiple rates. Experience will be very important in establishing the rate of release. It may be advisable to begin with a less

complex release rate where 50% of reserved capacity is available a month ahead with 80% made available a week ahead and 100% the day of sailing.

- Establish Commercial trucking travel agents to encourage truck use where it is most advantageous to commercial interests and WSF.

Prerequisites:

- A fully functional reservation system, i.e. one that meets all the business requirements of WSF, has been procured and tested at WSF for at least one summer season at Port Townsend-Keystone.
- Reservations and fare collection must be coupled – no fare, no reservation, etc.
- Prior to start up must have automated in-processing of vehicles
- Real time information on status of reservations and standby space must be available by phone, through on-road information systems (HAR) and on the web. These information links must be fully automated.

Possible Implementation Schedule

System could be rolled out on a 1-year roll out per route basis:

- Begin in Fall, with roll out on Friday, Saturday, Sunday peak sailings.
- Winter, continue to add in sailings but with lesser percent of capacity reserved.
- Spring dial up % of space reserved
- Summer bring to full end state.

Anacortes/San Juan Islands/Sidney, B.C.

Desired End State, or how the desired characteristics of the system after full implementation:

- All sailings to and from mainland at minimum 85% reserved, 95% for peak sailings.
- Two different rates of reservation release: One for sailings that are predominantly visitors another for predominantly islanders. Visitor: 15% of reserved capacity 3 months, 25% at two months, 50% at one month, 75% at one week, 90 % one day prior, 100% day of sailing. Resident: 30% of reserved capacity at one month, 50% at one week, 80% one day prior, 100% day of sailing. Both of these should be adjusted based on actual experience with reservation-making.

Prerequisites:

- Island agents must be very involved in design and implementation of a workable system.
- Reservations and fare collection must be coupled – no fare, no reservation.
- Eastbound reservations would be confirmed by possession of a travel document issued at the time an Eastbound reservation is accomplished. The form, function and method for how this document is issued and processed at the island terminals must be in place prior to system roll out.

- Could begin with less than fully automated in-processing at Anacortes, i.e. the system in place for the islands could be used temporarily at Anacortes, but prior to full roll out must have automated in-processing of vehicles at Anacortes
- Real time information on status of reservations and standby space must be available by phone, through on-road information systems (HAR) and on the web. These information links must be fully automated.

Implementation: 3 year roll out.

- Begin in Fall with roll out on Friday/Saturday Westbound sailings and Sunday Eastbound sailings.
- Summer add popular Friday afternoon/Saturday and Sunday sailings
- Off-Season install automated in-processing system -- continue weekend reservations
- Summer – reservations on all sailings at varying rates of capacity reserved
- Next off-season – continue to move to end state
- Summer – implement full end state.

Fauntleroy-Vashon-Southworth, Point Defiance-Tahlequah

Desired End State: Reservations for sailing at Fauntleroy, Southworth and Point Defiance.

- Peak sailings, (those with an average volume to capacity ratio of more than .9) -- 98% reserved, V/C ratio .8 to .9; 90% reserved, others 80% reserved.
- Reservation release would be uniform: 30% of reserved capacity at two weeks, 60% at one week, 90% one day prior, 100% day of sailing. Although this would be adjusted based on actual experience with reservation-making into multiple rates.

Prerequisites:

- Reservations and fare collection must be coupled – no fare, no reservation, etc.
- Prior to start up must have automated in-processing of vehicles
- Real time information on status of reservations and standby space

Implementation:

- It is recommended this would be after the North Sound routes are implemented where lessons learned could be applied.
- Full time roll out with some initial testing on selected sailings.
- Start with roll out on Fauntleroy, then add Southworth in about six months. Point Defiance would follow six months later.
- Consider – As Fauntleroy is the most capacity constrained point, fast processing of reservations will be crucial. Vehicle fares are needed to assist in controlling the reservation system at Fauntleroy, but eliminating passenger fares could significantly speed in-processing of vehicles at Fauntleroy. Another option worth considering is to implement proof of payment fare system on this route due to the unique nature of the route.

II. RESERVATION SYSTEM A USER PERSPECTIVE – STEP BY STEP

The reservation system will result in a significant shift in how customers use the ferry system. The following is a brief overview of how the system might look to an infrequent ferry rider and a regular daily commuter.

Infrequent Ferry Rider

- Customer decides they want to take a ferry, on a particular day at a particular time.
- Customer either:
 - Goes to on-line reservation system, or
 - Calls the reservation call center
- This could be accomplished as much as a month ahead or as little as 30 minutes ahead of desired time.
- Customer relates their desired travel and determines if space is available.
- If space is not available customer modifies requested sailing times or views all sailings with capacity available and makes another selection
- Once space is confirmed as available, customer confirms travel details including details of vehicle and number of passengers traveling
- Customer then proceeds to make a fare transaction (100% of fare) to complete the reservation either on phone or on-line.
- Fare paid by credit card, direct bank transaction, pre-paid account, or, if adequate time ahead, sends in cash.
- Confirmation number is provided once payment transaction is completed.
- At date and time of sailing customer arrives at terminal as much as 30 or as little as 10 minutes ahead of sailing.
- At the terminal reservation check-in is confirmed automatically. (Note: there are various technologies for accomplishing this, all in current use)
- There is a brief check in with terminal personnel to ensure details of reservation match details of travel, type of vehicle, number of passengers.
- Customer is directed into vehicle holding area
- Customer is loaded onto the boat.

Daily Commuter

- If pattern is daily and very regular, a person may decide to become a qualified commuter
- A qualified commuter:
 1. Establishes an account for fares with a minimum deposit, equivalent to buying a vehicle commuter book of tickets and agrees to maintain a positive balance with

re-charge of account at initial minimum deposit. This could be accomplished automatically, if desired.

2. Declares a particular sailing for particular days of the week may be as few as four up to seven days per week, may be a different sailing on some days, etc.
 3. Guarantees a reasonable, percentage, 60 to 75% of actual use of the reservation,
 4. Guarantees they will cancel or change reservation if they need to move to a different sailing or are gone for a day or days.
- There is an available pool of commuter only capacity declared for each sailing, higher on some sailings during regular commute times and lower at other times. Only qualified commuters have access to this capacity until one week prior to the sailing, then any unreserved capacity in the commuter pool becomes available for other reservations.
 - Once commuter establishes reservation for desired sailing, only exceptions or a change to the base reservation require interface with the reservation system.
 - If changes are needed commuter either makes change on-line or with call center, as long as change is made 30 minutes prior to sailing.
 - Commuter shows up for sailing up to 30 minutes before and as little as 10 minutes ahead of sailing.
 - Commuter vehicle is automatically processed into holding area with brief check for passenger fare. Commuter's account is charged appropriate vehicle fare, automatically, like "Good to Go" pass on Tacoma Narrows.
 - Commuter vehicle loaded onto ferry for desired sailing.

POSSIBLE SYSTEMWIDE RESERVATION POLICIES SEPTEMBER 3, 2008

Overview of Policy Framework

The following are the initial conceptual-level framework policies for the proposed reservation system. These policies are based on several inputs, including review of the policies of other ferry reservation systems, WSF experience with Port Townsend-Keystone and the Anacortes-Sidney service, customer impacts and considerations and the transportation demand planning goals for WSF.

- No sailing 100% reserved, most will be 50% to 95% reserved.
- Order of reserved space:
 - On designated sailings: space for carpools and vanpools (pre-set for designated sailings)
 - On designated sailings: space for commuters (see below)
 - On designated sailings: space for residents (see below, initially this would only be available for island communities)
 - Open for General Reservations
- Amount of reserved space and type of space will vary by route, time of day, day of year and will start at a relatively low percent and grow as customers adapt to the new system
- Encourage reservations
- It does not cost extra to make a reservation (no charge)
- Will not be implemented until the “right” technology has been identified
- Facility improvements to accommodate reservations will be made first
- Routes will be added gradually and policies adjusted based on experience
- Once a route begins a reservation system, it will only be for specific sailings, with reservations added to sailings gradually over time.
- Prepay car and driver fare to reserve space at time of reservation. Reservations accepted up to 30 minutes ahead of sailing.

1.1 Questions and Answers

- ***What happens if the user misses reservation?*** This will be a system-wide policy with the same application at all terminals. The following is an example of what the policy might look like. The timeframes are based on operational needs. The percent or amount of fare forfeiture penalties are examples only and have not been set.
 - To change or cancel a notification (30 minutes or more) with full credit issued for future sailing, good for one year.
 - Late cancel (from 30 minutes before to 5 minutes after sailing) – penalty of 25 to 30% of full fare rounded to nearest dollar.
 - No show (show up at dock or fail to notify more than 5 minutes after sailing)

- Travel within same day as reservation – penalty of 50% of full fare rounded to nearest dollar, balance remains available for travel
- Fail to travel on same day as reservation, forfeit entire fare.
- Optional (for discussion) No show/late cancel insurance: Cost \$20, allows three no shows/late cancels with no penalty or fare forfeiture. Is fully refundable if not used, \$10 refund if used once, \$5 refund if used twice.
- Refunds:
 - No refunds at terminal, 100% through back office.
 - Refunds available on request through back office or customer can choose to leave in account for future travel.
 - Optional automatic refund fee of \$5. If sailing never taken fare is automatically refunded. However, no refunds are available for no show and only a partial refund is available for a late cancel.
 - Any reservation impacted by a sailing cancellation is automatically refunded, unless customer has opted to leave unused fare in account.
- Customer misses sailing or changes reservation
 - As described above, a reservation can be changed or cancelled without penalty up to 30 minutes in advance of sailing.
 - Late arrivals (10 minutes or less before sailing) go into the stand-by queue (Note: Late arrivals do not bump an existing stand-by) By policy, standby queues at peak times will be set with a goal of filling the boat and leaving no one behind. Carry over standbys for multiple sailings will not be encouraged and standby volumes set to minimize any accumulation. Therefore, if a reserved customer misses a boat (arrive between 10 minutes prior to sailing and up to 5 minutes after) they pay the penalty (if assessed the late cancellation/change) and will likely be the first in the standby line for the next sailing. In essence this gives people late arriving with reservations preferred status for the next sailing. This could be further enforced by not allowing standbys to enter a terminal more than 30 minutes ahead of a sailing.
- ***What happens if the ferry (system) misses a reserved sailing?*** This will be a system-wide policy with the same application at all terminals. In many respects, however, options are limited as there will be a load of vehicles already on the dock if a sailing is cancelled at the last moment. The ferry system will work with all customers to complete their travel needs in the most expeditious way possible whether the customer has a reservation, or not. If the system cancels a sailing customers will be entitled to a full refund of the fare paid.
- All service on route suspended:
 - All reserved customers for expected duration of event will be notified to extent possible. Identify alternate ways for getting to their destination, which will likely include substitute routes.
 - If possible, customers will be diverted to another route for future sailings.
 - No new reservations will be accepted for that day, or expected duration of event, on the affected routes (both for the route where the sailings were canceled and substitute

- routes, with the exception of passengers affected by the canceled sailing wishing to change their reservation. No standbys will be accepted on substitute routes.
- Maximum/Minimum arrival times at terminals will continue in effect, except for customers arriving from directly affected route.
 - Late Cancellation and No show policies will not be used on affected route.
 - No heroic measures will be used to get reserved status customers access to the terminal.
 - Full Credit applied if customer chooses not to travel that day.
- Partial Service on route suspended (one boat missing on multiple vessel route)
- Reservations on cancelled sailings will have reservations cancelled for expected duration of event. Notification will be sent to degree possible.
 - Identify alternate ways for getting to their destination, which will likely include substitute routes.
 - No **new** reservations will be accepted for that day, or expected duration of event, on the affected routes (both for the route where the sailings were canceled and substitute routes, with the exception of passengers affected by the canceled sailing wishing to change their reservation
 - Encourage (and assist where possible) in making reservations for substitute routes
 - Stand-bys on the route where the sailing was canceled will be closed for the remainder of the day. Reservations will have priority for non-reserved space at affected or “substitute” terminal.
 - Boarding priority for remaining sailings:
 - Reserved customers on first cancelled sailing
 - Reserved customers for future non-cancelled sailings on affected route
 - Reserved customers for future cancelled sailings.
 - Maximum/Minimum arrival times at terminals will continue in effect.
 - No heroic measures will be used to get reserved status customers access to the terminal.
 - Late Cancellation and No show policies will be suspended on affected route.
 - Full Credit applied if customer chooses not to travel on the ferry that day
- ***How can WSF ensure customers that reservation system will work?*** Every major ferry system in the world either has moved, or is moving, to a reservation system for exactly the same reasons WSF is considering a similar action; the ability to predict the size of terminal facility needed and maintain the site in a constrained environment with constrained capital, to help flatten out demand and to act as a customer benefit. Private ferry operators are using reservation systems to minimize costs for shore side facilities, because they produce little, or no, revenue. There are several software developers that have reservation products already on the market, specifically built around the business needs of ferry systems. One vendor lists 50 ferry systems as a client base. Automated fare collection has already been introduced in Washington

State and is working flawlessly on two state facilities. WSF intends to take advantage of the experience and the infrastructure already in place within the state.

- ***Should a reservation system be designed one-size-fits-all or route by route?*** The basic system will be the same for all routes, but the unique characteristics of that route will be reflected in how the system is deployed and what features of the system are used to best meet the needs of the customers and the ferry system. So the amount of the vessel reserved and when capacity becomes available will almost certainly vary by route, but the customer interface will be the same from route to route.
- ***How do we integrate a reservations system with the fare system?*** The design of the system will be such that fare collection and reservation will be fully integrated. Payment of fare will be required when reservations are made and will be a seamless part of the process. Confirmation of travel will be accomplished electronically.
- ***How do we treat residents v. frequent users v. tourists?*** There are both practical and legal aspects to this question. The preliminary advice from the Attorney General's office is that reservation system policies can be established that would allow frequent users and possibly residents access to the system in a way that offers priority. These policies would be open to any person who qualifies, but would offer frequent users and residents access to reserved capacity before other customers. There are many details to be finalized but an initial draft of policies for frequent users and residents is contained below:
 - Commuter Program
 - Eligibility – Anyone who registers as a commuter, recharges fare account with minimum \$250 increment (or approximately the value of a vehicle frequent user book of tickets) and travels a minimum of 4 days per week. Available only for vehicles up to full sized pick-up. Commuters may register up to three vehicles but must declare a specific vehicle for each sailing taken.
 - WSF will declare certain sailing to be “commuter” sailing and set aside up to 50% of the reserved capacity (not including vanpools) for commuter reservation
 - Commuters will be required to establish a regular sailing for each direction on each day of the week. However, once a reservation is made it will continue to roll over until commuter notifies WSF of desire to cancel or change.
 - Commuters can waitlist desire for reserved space if all commuter priority space is booked. Will be allowed up to 24 hours to respond to space availability before it passes to next person requesting. If passed, commuter will be notified and commuter may request waitlist status again.
 - Commuters are bound by the same change/cancellation policy as described above for a change or cancellation of a single sailing.
 - For multiple days/sailings change or cancellation, e.g. commuter goes on vacation or extended trip, 24 hours notice is required.
 - To remain in commuter program at least 75% of designated reserved sailings must be taken, not cancelled.
 - Penalties for misuse of commuter priority – more than 3 no shows in a 30 day rolling period leads to automatic exclusion from the commuter priority for 6 months and WSF would refund all funds remaining in the commuter account.

- One week in advance of sailing WSF will release all unused commuter capacity for resident or general public use. Therefore, commuters may have to wait up to one week before being able to book into commuter priority.
- Resident Program
 - Applicable to San Juan Islands and Vashon only at outset of program, other routes could be added in future.
 - Residents must establish proof of residency with annual re-certification process. Only non-commercial vehicles up to a full sized pick-up truck. Residents may designate up to three such vehicles as qualified for use in the resident program, but must designate specific vehicle for each reserved sailing.
 - WSF will reserve some percent of capacity which will vary from 10 % to 90% depending on sailing and time of year, for resident program.
 - Capacity for resident reservation will be released with some amount of resident priority capacity one week before sailing and the remainder released one day ahead of sailing. It should be noted this space allocation will only be available to those who qualify for the resident program. Residents then make reservations using the designated priority capacity. Day of sailing all resident capacity is released for general reservations and stand-by.
 - Change and Cancellation policy is same as outlined above.
 - Penalties for misuse of resident priority are triggered if more than 3 no shows are recorded on any rolling 90 day period. Residents will be excluded from priority program for 6 months if policy is violated, then required to re-establish proof of residency.

How do customers deal with the perceived loss of spontaneity? While a different approach to using WSF, the reservation system will improve the ability to make spontaneous travel decisions. Today, if one decides to take a ferry spur of the moment, they could reach the dock only to find the ferry that want to take is full and have to wait for the next. With a reservation system in place one can find out ahead of time if there is space available on the desired sailing and can make a reservation if needed or desired. While this does involve a little more planning, it does enhance the predictability of ones travel, even trips that are planned on the spur of the moment. What it does not do is require a person to arrive at the terminal to determine if a particular sailing is available.

- ***What is the cost/benefit of reservation system?*** Compared to building terminal facilities of adequate size to accommodate unconstrained arriving vehicles, it is highly cost beneficial. The estimated system-wide capital cost for a reservation system is approximately \$28 million. This is a fraction of the cost of expanding one terminal in the WSF system. Using Edmonds-Kingston as an example, both terminals are regularly over capacity at peak times. The traffic and economic impacts on the host communities are negative. The costs to fix the problem with capital investment are very high. Fixing the problem using a remote holding facility also increases costs for acquisition, maintenance and operation of a facility that is only used part of the time. In this case a reservation system could avoid very significant capital costs while reducing the impact of the terminal on the host communities. Annual operating costs of a reservation system are currently unknown. These will be explored in greater detail during the pre-design process.
- ***How does a reservations system affect “equity”?*** “Equity” is a term that is difficult to define, since everyone has a different view of what is “equitable”. However, a reservation system will be

designed as inherently open. However, as in any unique operating environment, people most familiar with system will always have an advantage as they know the ins and outs of the daily routine. As currently conceived, the system would not require additional fare payment to reserve a space on a crossing.

Reservation System Customer Use Scenarios

Scenario 1

I am a regular walk on and I just found out I need to take my car to work tomorrow. Now if I do that I know I can get in line for the 5:30 a.m. from Bainbridge and I'll be on the 7:05 for sure. What do I do now, with only one day's notice?

Two options:

1. Go on-line or call the phone center and determine if reserved space is open for your desired range of sailings. Reservations can be made, if space is available, as little as 30 minutes ahead of time. If space is available, make a reservation, arrive 10 to 30 minutes ahead of sailing. A percentage of space will be allocated to be released a day before the sailing.
2. Standby's will be limited but available, very likely you could behave exactly as you do today and still make the 7:05 am sailing.

Scenario 2

I am a tourist, new to the area, it's a weekend in August. I need to get from Edmonds to Kingston. What do I do, what are my options for getting reservations, and will I plug up the whole reservation system with my confused questions?

Two options:

1. Pull into your favorite stopping place, fast food, service station, coffee shop, park, etc. Call ferry system reservations and find out when capacity will be available, make a reservation, arrive 10 to 30 minutes ahead.
2. Stop at a location with web access, (some local businesses already provide complimentary access to WSF's Port Townsend reservation system through the web). Determine availability of space, make your reservation, arrive at terminal 10 to 30 minutes ahead.

The reservation call center will be staffed appropriately to handle questions and issues for customers. It is not as likely that someone in your situation would be travelling on a Wednesday in January as a Friday in August. Reservation call center would be staffed accordingly. This situation is very common in ferry systems with very high tourism traffic, Martha's Vineyard, Nantucket Island, Vancouver Island, all have demonstrated that it is possible to accommodate people with many questions, as well as experienced customers.

Scenario 3

I live and work on Bainbridge, but suddenly I want to go to dinner in Bellevue. It's Saturday. What do I do?

Three options:

1. Typically Saturday late afternoon and evenings are not peak traffic for Bainbridge. You may wish to use one of the benefits of reservations to view available capacity on a series of sailings and simply show up at the terminal as a stand-by.
2. If you want to be absolutely sure go on-line or call the reservation center and determine if reserved space is open for your desired range of sailings. If so, make a reservation, arrive 10 to 30 minutes ahead of sailing. Better make a reservation for that dinner in Bellevue, too!
3. Standby's will be available. So the same as you operate today you may chose to just take your chances and show up at the ferry terminal. If the boat is not full, great. If it is full when you arrive, it would be very similar to today's situation, you never know until you get there. Options 1 and 2 offer more assurance that you can travel when you want.

Scenario 4

I am a regular car commuter and have a set block of reservations this week. But, I have to work an hour late tonight. It's Friday, too, by the way. What do I do?

Two Options:

1. Go on-line or call reservation center, cancel your regular reservation and re-book for a later sailing that fits you extended schedule and that has space available.
2. Go on-line or call reservation center, cancel your regular reservation show up a terminal for later sailing as a stand-by.